

long-antennæd, spotted creature which is the young of this Locustid. Fischer well figures the imagos, which are generally common in August and September on oak trees, in both sexes, on his plate xii., figs. 19 and 20. In the middle of May of last year Mr. Bignell bred three of these young larvæ from galls collected the previous autumn; hence *M. varium* must hibernate as an egg.

NEUROPTERA.

Elipsocus Westwoodii, M'Lach. — Two Psoci bred by Mr. Bignell (one on 19th May and one on 16th August, 1879) were thus named for me by Mr. M'Lachlan, who adds, "The neuration of the specimen on the oblong card is in an abnormal condition on the right anterior wing; this and the different setting made it appear a separate species." In 1872 I bred some eight or ten *Psocidæ* from these and *terminalis* galls which I sent to Mr. Walker, who also had bred several examples. Mr. M'Lachlan suggests that they enter the old pierced galls as larvæ to feed on the vegetable débris. This is most probable, as Mr. Bignell had kept the galls from which the last specimen was bred very nearly a twelvemonth.

Hemerobius subnebulosus, Steph.—In the spring of this year Mr. Bignell bred two specimens of this *Hemerobius* from the old galls; they were identified by Mr. M'Lachlan. This appears to be the same species that Mr. Walker bred in April, 1874, from galls collected in the autumn of 1873. The *Hemerobiidæ* are well known Aphis-devourers in the larva state, so it is probable that the galls are only used as convenient shelter for their cocoons.

Maldon, Essex, August, 1880.

THREE NEW ICHNEUMONS.

By JOHN B. BRIDGMAN.

THE three species of *Ichneumonidæ* now described apparently belong to the same group, and notwithstanding their general Pimplid look may fairly be placed between *Phygadeuon* and *Hemiteles*; but for their affinities see the article on the gall-bred insects by Mr. Fitch. They are all, I believe, undescribed, so a specific description is given of each and of the general characters

of the genus, although possibly the red-banded species may not exactly belong to it. It is, however, impossible to deal exhaustively with the group until the genus *Hemiteles* has undergone a similar revision to that of *Cryptus* and *Phygadeuon* at the hands of Thomson.

Hemiteles monospilus, described by Gravenhorst and Taschenberg, is very much like the red-banded species in colour and size, but the description of the metathorax is very different from our insect. Taschenberg places it in a division having "the metathorax elongated, without complete areæ, the back part very oblique, almost confused with the upper part." In our species the two parts are of equal length and at almost right angles.

CECIDONOMUS, nov. gen.

Head more or less globose; antennæ filiform, shorter than abdomen. Width between the eyes and base of mandibles equal to width of base of mandibles. Thorax a little longer than high; legs moderately slender; wings with or without areolet, if present then pentagonal; posterior inferior angle of prædiscoïdal cell, acute; metathorax with five more or less distinct areæ, the supero-medial more or less subpentagonal; thorax alutaceous.

Abdomen subpetiolated, depressed somewhat, apex more or less compressed, 1st segment gradually tapering, with tubercles; aculeus about as long as the abdomen; abdomen about as long as the head and thorax and about as wide as the thorax, the widest part being at the apex of the 2nd segment.

Cecidonomus Westoni, n. sp.

Length 4—6 mill., female. Black; head, thorax, and abdomen black, legs red, apex of intermediate sometimes deeper; apex of hinder femora, tarsi, and tibiæ fuscous; this latter base and middle paler-banded.

Head and thorax coarsely alutaceous, abdomen coarsely and closely punctured, punctures running into each other; metathorax coarsely wrinkled, areæ distinct, supero-medial pentagonal with the lower sides shorter than the upper ones; areolet of wings pentagonal, transverse anal nervure divided below the centre; antennæ about two-thirds the length of the body; aculeus a little longer than the abdomen. Male differs only in having the front

and intermediate coxæ fuscous, more or less pale at the apex, and the hinder ones black.

Fifteen males and nine females bred by Mr. Weston from galls, 1878—9.

Cecidonomus gallicola, n. sp.

Length 4—6 mill., female. Black; legs red, coxæ and trochanters black, apex of hind tibiæ and tarsi sometimes fuscous.

Head and thorax finely alutaceous, first three segments finely alutaceo-punctated, rather more coarsely marked than the thorax, the remaining segment glabrous; areæ of metathorax not so distinct as in the former species, and in form an irregular hexagon, broader than long, narrower in front than behind in the female, more regular, about as broad as long in the male; wings with no areolet, transverse anal nervure divided in or just below the centre; antennæ about two-thirds the length of the body; aculeus a little longer than the abdomen. Male like the female, but has the front and intermediate coxæ fuscous at the base, the hinder entirely so; trochanters red, except the base of the hinder ones.

The finer sculpture, shining apex of the abdomen (and dark coxæ and trochanters in the female), readily distinguish this species.

Two males and four females bred by Mr. Weston from galls, 1878—9. I have taken three males at Norwich.

Cecidonomus? rufus, n. sp.

Length 4—5 mill., female. Black; 2nd and base of 3rd segment of abdomen and legs red, the apex of intermediate and posterior tibiæ and tarsi more or less fuscous.

Head and thorax finely alutaceous; abdomen densely and finely punctured on the 1st segment running into each other; antennæ about two-thirds the length of the body. Wings without areolet, transverse anal nervure broken below the centre; areæ of metathorax distinct, supero-medial varies from a blunt-ended pentagon to a blunt-ended hexagon, about as broad as long, the lower side areæ being shorter than upper ones; aculeus as long as the abdomen and distinctly curved downwards.

Two females bred by Mr. Weston from galls in 1878, and one in 1879. I have also taken two females near Norwich.

Erratum.—Page 261, under LEPIDOPTERA. *Heusimene fimbriana*, *Catoptria Juliana*, should come after *C. argyrana* in the previous line, among the species bred by Mr. Weston.